

## ABSTRACT

A method and apparatus of diagnosing a cardiac disease state in as little as two minutes involving the utilization of an evanescent wave assay system in conjunction with a data acquisition and analysis procedure that monitors the precision of assay results in real time (*i.e.*, while data is being acquired). The method includes diagnosing a disease state using a diagnostic procedure (*e.g.*, an immunoassay) wherein the testing device informs the person conducting the test of the results of the test as soon as reliable test data is obtained (generally, <5% variation in the reaction rate of the assay). After which point, the diagnostic procedure may be terminated.

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